



JON M. HUNTSMAN, JR.  
Governor

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Lieutenant Governor

## State of Utah

### DEPARTMENT OF NATURAL RESOURCES

MICHAEL R. STYLER  
Executive Director

#### Division of Oil, Gas and Mining

JOHN R. BAZA  
Division Director

Outgoing

C0070005

# 3283

Q

August 31, 2009

Wess Sorensen, Mine Manager  
Canyon Fuel Company, LLC  
HC 35 Box 380  
Helper, Utah 84526

Subject: 2008 Annual Report Review, Skyline Mine, C/007/0005, Task ID # 3283  
Outgoing File

Dear Mr. Sorensen:

The Division staff has completed the 2008 Annual Report Review. Enclosed is a copy of the review for Skyline Mine, C/007/0005 completed on August 27, 2009.

Thank you for your diligence in completing the Annual Report. If you have any questions, please call me at (801) 538-5325.

Sincerely,

Daron Haddock  
Permit Supervisor

sqs  
Enclosure  
O:\007005.SKY\FINAL\WG3283\reviewletter.doc



This Annual Report shows information the Division has for your mine. Please review the information to see if it is current. If the information needs to be updated please do so in this document. At the end of each section the operator is asked to verify if the information is correct. Please answer these questions and make all comments on this document. Submit the completed document and any additional information identified in the Appendices to the Division by April 30, 2009. During a complete inspection an inspector will check and verify the information. To enter text, click in the cell and type your response. You can use the tab key to move from one field to the next. To enter an X in a box, click next to the box, right click, and select properties, then the checked circle, then hit enter, or hit the unchecked circle if the X is to be removed.

## GENERAL INFORMATION

|                                 |   |
|---------------------------------|---|
| Permitte Name                   | Canyon Fuel Company, LLC                                    |
| Mine Name                       | Skyline Mine  |
| Operator Name                   |   |
| (If other then permittee)       |   |
| Permit Expiration Date          | April 30, 2012  |
| Permit Number                   | C/007/0005  |
| Authorized Representative Title | Wess Sorensen, Mine Manager                                 |
| Phone Number                    | (435) 448-2619  |
| Fax Number                      | (435) 448-2636  |
| E-mail Address                  | wsorensen@archcoal.com                                      |
| Mailing Address                 | Skyline Mine HRC 35 Box 380 Helper, UT 84526                |
| Designated Representative       | Gregg Galecki   |
| Resident Agent                  | Corporation Trust Company                                   |
| Resident Agent Mailing Address  | Corporation Trust Company 1209 Orange Street Wilmington, DE |
| Number of Binders Submitted     | 2   |

Operator, please update any incorrect information.

## IDENTIFICATION OF OTHER PERMITS

Identify other permits that are required in conjunction with mining and reclamation activities.

| Permit Type           | ID Number              | Description   | Expiration Date |
|-----------------------|------------------------|---|-----------------|
| MSHA Mine ID(s)       | 42-01566               | Skyline Mine #3   | N/A             |
|                       | 1211-UT-09-42-01566-01 | Skyline Mine Waste Rock Disposal                                      | N/A             |
|                       |                        |   |                 |
| MSHA Impoundment(s)   | None                   |   |                 |
| NPDES/UPDES Permit(s) | UT 0023540-01, 02, 03  | UPDES Permit for Skyline Mine, Rail Loadout, Waste Rock Disposal Site | 11/30/09        |
| PSD Permit(s) (Air)   | 10092                  | Approval Order  | N/A             |
| <b>Other</b>          |                        |   |                 |
| Storm Water Permit    | UTR000578              | Storm Water Discharge Permit  | 12/31/11        |
|                       |                        |   |                 |
|                       |                        |   |                 |

Operator, please update any incorrect information.

## CERTIFIED REPORTS

List the certified inspection reports as required by the rules and under the approved plan that must be periodically submitted to the Division. Specify whether the information is included as Appendix A to this report or currently on file with the Division.

**Certified Reports:**      **Required**      **Included**      **or**      **DOGM file location**  
                                  Yes    No      Included      Vol, Chapter, Page

|                    |                                     |                                     |                          |   |
|--------------------|-------------------------------------|-------------------------------------|--------------------------|---|
| Excess Spoil Piles | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input type="checkbox"/> |   |
| Refuse Piles       | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/> | Submitted electronically via email on 2/4/09          |
| Impoundments       | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/> | Submitted electronically via email on 2/4/09 & 5/6/09 |
| <b>Other</b>       |                                     |                                     |                          |   |
|                    | <input type="checkbox"/>            | <input type="checkbox"/>            | <input type="checkbox"/> |   |
|                    | <input type="checkbox"/>            | <input type="checkbox"/>            | <input type="checkbox"/> |   |

**Operator Comments:**

**Inspector:**

Has the operator complied with this section? Yes ☒ No ☐

**Inspector Comments:**

## COMMITMENTS AND CONDITIONS

The Permittee is responsible for ensuring annual technical commitments in the MRP and conditions accepted with the permit are completed throughout the year. The Division has identified these commitments below and has provided space for you to report what you have done during the past year for each commitment. If the particular section is blank, no commitment has been identified and no response is required for this report. If additional written response is required, it should be filed under Appendix B to this report.

Admin R645-301-100

Soils R645-301-200

**Title: WASTE ROCK SAMPLING**

**Objective:** To document chemical characteristics and support reclamation plan using less than four feet of cover and to protect surface and groundwater.

**Frequency:** During periods of deposition at the waste rock site.

**Status:** Quarterly sampling, 1 sample per 2000 tons hauled to disposal site.

**Reports:** Annual reporting.

**Citation:** Vol. 3, Section 4.4, pg. 4-30, 2nd para. And 1988 Soils Guidelines Table 6.

**Operator Comments:** Lab Analysis is included in Appendix B

**Inspector:**

Has the operator complied with this section? Yes ☒ No ☐

**Inspector Comments:** Lab information is in Appendix A. The information needs to be reviewed by the Division Soil Scientist to assure that it meets the Division requirements.

On August 27, 2009, Priscilla Burton, CPSSc, reviewed the information in the annual report and that referenced by the annual report. The refuse pile certification was sent by email on 2/4/2009 and is recorded as 2009 Incoming document 0008. This document states that 56,138 Tons of waste rock was hauled to the site during the 4<sup>th</sup> quarter 2008.

Approximately 67,036 tons were removed from the site in the fourth quarter. The net removal was 10,898 tons of material. The report further states that 3,768 tons of waste rock has been screened and separated for re-burial at the site. The report also states that since June 2008, 127,617 tons of waste was removed from the site. Four waste rock samples were taken during 2008, 2 in March and 2 in June. There were no extremes of pH or SAR. The values for Se and B were low. The waste has a texture of loamy sand and is not projected to be acid-forming based upon total sulfur values.

**Title: SUBSOIL SAMPLING AT WASTE ROCK SITE.**

**Objective:** To provide chemical characteristics of purchased subsoil.

**Frequency:** Sample purchased subsoil for parameters in Table 1 of the Utah 1988 Guidelines.

**Status:** Ongoing with contemporaneous reclamation at the waste rock site.

**Reports:** None specified. Suggest verbal communication with Division and lab analysis to be included in bond release application.

**Citation:** Vol. 3, Section 4.6.4.1, pg. 4-38a, 3rd para. And pg. 4-38b.

**Operator Comments:** No subsoil or substitute topsoil was purchased in 2008

**Inspector:**

Has the operator complied with this section? Yes ☒ No ☐

**Inspector Comments:**

**Title:** SAMPLING PRIOR TO SLURRY PLACEMENT IN ABANDON UNDERGROUND WORKINGS.

**Objective:** Protection of groundwater.

**Frequency:** Every 450 ft. of advance.

**Status:** Ongoing.

**Reports:** Notification if parameters are out of compliance with Guidelines for Topsoil and Overburden.

**Citation:** Volume 2, Incorporation of 97K-1 and Section 1.2 (at the end of Section 3.2) and Section 3.2.8.

**Operator Comments:** No Slurry was pumped underground in 2008.

**Inspector:**

Has the operator complied with this section? Yes ☒ No ☐

**Inspector Comments:**

**Title:** SAMPLING OF WASTE ROCK IN TEMPORARY STOCKPILES.

**Objective:** Protection of surface and groundwater.

**Frequency:** If remains in temporary location longer than three months.

**Status:** 1 sample/ 2000 tons of temporary stockpiled material.

**Reports:** Annual reporting not specified, but assumed to be the same as disposal site sampling (previous paragraph on same page).

**Citation:** Vol. 3, Section 4.4, pg. 4-30, 3rd para. And 1988 Soils Guidelines Table 6.

**Operator Comments:** No temporary Waste Rock was stockpiled for longer than three (3) months in 2008.

**Inspector:**

Has the operator complied with this section? Yes ☒ No ☐

**Inspector Comments:**

**Title: CULTURAL RESOURCES**

**Objective:** If during the course of mining operations, previously unidentified cultural resources are discovered, the Permittee shall ensure that the site(s) is not disturbed and shall notify the Division of Oil, Gas, and Mining. The Division, after coordination with OSM, shall inform the Permittee of necessary actions required. The Permittee shall implement the mitigation measures required by the Division within the time frame specified by the Division.

**Frequency:** As needed.

**Status:** Ongoing.

**Reports:** Annual.

**Citation:** Permit Condition Sec. 16.

**Operator Comments:** No previously unidentified cultural resources were discovered in 2008 that would have been disturbed.

**Inspector:**

Has the operator complied with this section? Yes ☒ No ☐

**Inspector Comments:**

**Title: MACROINVERTEBRATE SURVEYS**

**Objective:** To determine if mining and mining related activities are impacting the perennial streams located in Woods, Eccles, Burnout and James Canyons.

**Frequency:** Fall and Spring every three years beginning in 2007.

**Status:** Ongoing.

**Reports:** Annual.

**Citation:** Appendix A-3, Volume 2, The Macro benthos of Burnout and James Canyon Creek. Benthos of Boardinghouse & Eccles Creek, Fall 2001. Macroinvertebrates of Eccles Creek, October 2004. Volume 1A, Section 2.8, pages 2-71, 71A, B, C, Section 2.8, table 2.8-1a.

**Operator Comments:** Field work was conducted I both 2007 and 2008; reports are being prepared.

**Inspector:**

Has the operator complied with this section? Yes ☒ No ☐

**Inspector Comments:** In Process.

**Title: FISH SURVEYS**

**Objective:** To determine if mining and mining related activities are impacting the perennial streams located in Eccles,

**Frequency:** In the Fall Every three years beginning in 2007.

**Status:** Ongoing.

**Reports:** Annual.

**Citation:** Volume 1A, Section 2.8, page 2-71.

**Operator Comments:** Field work was conducted in 2007; reports are located in Appendix B.

**Inspector:**

Has the operator complied with this section? Yes ☒ No ☐

**Inspector Comments:** The report is in Appendix B of the 2008 Annual Report. The report needs to be reviewed by the assigned Division Biologist to make sure it meets the Divisions requirements.

The reports were reviewed by Division biologist Ingrid Wieser in June 2009. The Woods Creek survey commitment was completed in 2002.

**Eccles Creek:**

Estimates of cutthroat trout population densities in Eccles Creek were taken by Dennis Shiozawa of Mt. Nebo Scientific in September to October of 2007. The report is intended to record the fish populations found in four reaches of Eccles Creek continually to document changes possibly resulting from water discharges beginning in 2001 from Skyline Mine. Baseline data was recorded in October 2004. Overall, the 2007 estimated density per linear meter of stream increased. Rainbow, cutthroat and hybrids were identified in 2007, which differs from baseline data where only cutthroat were identified. Little to no spawning habitat exists in three of the sample sites and spawning did not occur recently at the fourth site. However, the report indicated that trout populations are increasing and can survive in the stream.

**Burnout and James Canyon Creeks**

Estimates of cutthroat trout population densities were taken by Dennis Shiozawa of Mt. Nebo Scientific in October of 2007 for James Canyon and Burnout Creeks. Population studies had been previously conducted in 2000, 2001 and 2004. James Canyon Creek: A significant drop in fish populations occurred in this Canyon between 2000 and 2001 due to low water levels in Electric Lake. In 2007, the fish population was up 50% from 2001 but still far below 2000 levels. Size classes of fish recorded suggested that spawning success occurred in 2006 and 2007 and that the stream is recovering from drought impacts.

Burnout Creek: Fish populations declined slightly between 2000 and 2004. 2007 data showed that the majority of the fish in the creek were tiger trout differing from 2000 in which all were cutthroat. It was assumed that the tiger trout were present as a result of DWR stocking. The report concluded that cutthroat trout decline is due to low water levels, whirling disease, or the addition of tiger trout to the stream.

**Title: RAPTOR SURVEY**

**Objective:** To monitor the status of a nest located within a ¼ mile of the waste rock expansion area.

**Frequency:** Once in 2008

**Status:** One survey

**Reports:** In 2008 annual report

**Citation:** Vol. 1A, Setion 2.10 page 2-111.

**Inspector:**

Has the Operator complied with this section? Yes ☒ No ☐

**Inspector Comments:**

The operator sent an email to amend the annual report to include the raptor survey. The raptor nest located near the Waste rock expansion area was visually monitored by the company on March 18, April 25, May 16, May 30, June 17 and June 25. No activity occurred in the nest on these dates. No additional monitoring of the nest is scheduled in the future.

**Title:** Vegetation survey program for the Winter Quarters and Woods Stream channels.

**Objective:** Baseline and monitoring surveys for vegetation along stream channels.

**Frequency:** Baseline survey of entire length of channels in 2005, monitoring surveys two years prior and during undermining of specific lengths of the channels, and follow-up surveys two years after undermining.

**Status:** Ongoing

**Reports:** Division's Annual Report

**Citation:** Vol. A-2 2<sup>nd</sup> volume; Vol. A-3 2<sup>nd</sup> volume.

**Inspector:**

Has the Operator complied with this section? Yes ☒ No ☐

**Inspector Comments:**

Vegetation report was prepared by Patrick Collins of Mt. Nebo Scientific in August of 2008. The report summarizes the monitoring of riparian plant communities in selected reaches of Winter Quarters Canyon. Baseline data was collected in 2005 and will be used to compare to current monitoring to analyze long term trends, natural variability and benchmark information including possible impacts to the riparian plant communities caused by mining below the riparian areas. The dominant plant communities in the study areas were riparian, spruce-fir, aspen/grass, sagebrush/grass and mountain herblands. Qualitative and quantitative data were recorded. Twenty five sample stations were monitored in the section 11 drainage, no name drainage and box canyon.



**Title: TOPSOIL SAMPLING.****Objective:** To determine fertilizer application rate.**Frequency:** At final reclamation sample topsoil for N, P, K, Fe, Mg, Mn, Zn, Ca and pH.**Status:** Analysis of redistributed topsoil.**Reports:** None specified. Suggest verbal communication with Division and lab analysis to be included in bond release application.**Citation:** Vol. 3, Section 4.5, pg. 4-32, 2nd para.**Operator Comments:** No Topsoil was redistributed in 2008; no analysis of Topsoil was conducted.**Inspector:**Has the operator complied with this section? Yes ☒ No ☐**Inspector Comments:**

Landuse, Cultural Resources, Air Quality R645-301- 400

Engineering R645-301-500

Geology R645-301-600

Hydrology R645-301-700

**Title: Age-monitoring of Water.****Objective:** Understand possible sources of groundwater inflows**Frequency:** When inflows of 800 gpm are encountered.**Status:** No significant inflows in the North Lease.**Reports:** As needed.**Citation:** Volume 1, Page 2-35b, Paragraph 2.**Operator Comments:** Mine #2 sites have not been accessible since 2004. No sustained inflows >800gpm have been encountered in the North Lease are of Mine #3. No additional age-dating water analysis has been collected.**Inspector:**Has the operator complied with this section? Yes ☒ No ☐**Inspector Comments:**

**Title: Measurement of Sediment Yield.**

**Objective:** Understand how much excess sediment the mine is contributing to Eccles Creek.

**Frequency:** Annually.

**Status:** Ongoing.

**Reports:** Annually.

**Citation:** Volume 1a, Page 2-43a, Paragraph 2.

**Operator Comments:** Study was discontinued per page 2-45 and 2-46 of M&RP. Average discharges are currently below 5,000 gpm.

**Inspector:**

Has the operator complied with this section? Yes ☒ No ☐

**Inspector Comments:**

**Title: North Lease Perennial Stream Flow Measurement.**

**Objective:** Understand the impact of longwall mining on perennial portions of streams in Winter Quarters and Woods Canyons.

**Frequency:** Monthly, June through October and when accessible, 1 year prior to, during and 1 year after undermining.

**Status:** Ongoing.

**Reports:** Quarterly to database - we should ask for a better map, or list of undermined dates for these sites yearly, otherwise it is impossible to tell if they are within the timeframes.

**Citation:** Volume 1a, Page 2-44a, Paragraph 5.

**Operator Comments:** Sites NL-13 and NL-14 will be dropped this year. An application to modify and reduce the NL site spacing will be submitted in 2<sup>nd</sup> quarter 2009.

**Inspector:**

Has the operator complied with this section? Yes ☒ No ☐

**Inspector Comments:**

**Title: Monthly Reporting of Pumped Flows to Electric Lake and Eccles Creek.**

**Objective:** Be aware at all times, of the volume of water being pumped out of the Skyline Mine, and to which drainage.

**Frequency:** Cumulative monthly flows.

**Status:** Ongoing.

**Reports:** Monthly - first week.

**Citation:** Permit Condition 2.

**Operator Comments:** The information has been submitted as required.

**Inspector:**

Has the operator complied with this section? Yes ☒ No ☐

**Inspector Comments:**

Bonding &amp; Insurance R645-301-800

**Other Commitments**

\*Reminder: If equipment has been abandoned during 2008, an amendment must be submitted that includes a map showing its location, a description of what was abandoned, whether there were any hazardous or toxic materials and any revision to the PHC as necessary.

**REPORTING OF OTHER TECHNICAL DATA**

List other technical data and information as required under the approved plan, which must be periodically submitted to the Division. Specify whether the information is included as Appendix B to this report or currently on file with the Division.

**Operator Comments:****Inspector:**

Has the operator complied with this section? Yes ☐ No ☐

**Inspector Comments:** No information provided.

**LEGAL, FINANCIAL, COMPLIANCE AND RELATED INFORMATION**

Change in administration or corporate structure can often bring about necessary changes to information found in the mining and reclamation plan. The Division is Requesting that each permittee review and update the legal, financial, compliance and related information in the plan as part of the annual report. Please provide the Department of Commerce, Annual Report of Officers, or other equivalent information as necessary to ensure that the information provided in the plan is current. Provide any other change as necessary regarding land ownership, lease acquisitions, legal results from appeals of violations, or other changes as necessary to update information required in the mining and reclamation plan. Include certified financial statements, audits or worksheets, which may be required to meet bonding requirements. Specify whether the information is currently on file with the Division or included as Appendix C to the report.

| Legal / Financial Update                          | Required                            |                          | Included                 | or | DOGM File location<br>Vol, Chapter, Page  |
|---|-------------------------------------|--------------------------|--------------------------|----|---|
|   | Yes                                 | No                       |                          |    |   |
| Department of Commerce,<br>Annual Report Officers | <input type="checkbox"/>            | <input type="checkbox"/> | <input type="checkbox"/> |    |   |
| <b>Other</b>                                      |                                     |                          |                          |    |   |
| Officers and Directors                            | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |    | <input type="checkbox"/> Submitted by V. Miller on 4/30/09. Stand alone Volume<br>"General Chapter 1" |
|   | <input type="checkbox"/>            | <input type="checkbox"/> | <input type="checkbox"/> |    |   |

**Other**

Officers and Directors

☒☐☐
☐ Submitted by V. Miller on 4/30/09. Stand alone Volume  
"General Chapter 1"

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|--|--|--|--|

[illegible]

**Operator Comments:****Inspector:**

Has the operator complied with this section? Yes ☒ No ☐

**Inspector Comments:** A cumulative subsidence map from 1982 to 2008 is included in the 2008 Annual Report. No comparison of subsidence in conjunction with mining activities is shown. The map does not delineate in which year the the subsidence actually occurred just that it happed between 1982 and 2008. The Division requires subsidence information, but has never set a standard or format that the information needs to be provided in.

A map is included in the 2008 Annual Report that shows the areas mined in 2008. In addition there is a map that shows future projections of mining through 2020.

**OTHER INFORMATION**

Please provide any comments of further information to be included as part of the Annual Report. Any other attachments are to be provided as Appendix E to this report. If information is submitted as a group rather than by individual mine, please identify each of the mine's data in the list below.

**Additional attachment to this report?**

Yes ☐

No ☐

**Operator Comments:**

**Inspector:**

Has the operator complied with this section? Yes ☐ No ☐

**Inspector Comments: No information provided.**

**APPENDIX A**

**Certified Reports**

Excess Spoil Piles  
Refuse Piles  
Impoundments

As required under R645-301-514

**CONTENTS**

**APPENDIX B**

**Reporting of Technical Data**

Including monitoring data, reports, maps, and other information  
As required under the approved plan or as required by the Division

In accordance with the requirement of R645-310-130 and R645-301-140

**CONTENTS**



**APPENDIX C**

**Legal Financial, Compliance and Related Information**

Annual Report of Officers  
As submitted to the Utah Department of Commerce

Other change in ownership and control information  
As required under R645-301-110

**CONTENTS**

**APPENDIX D**

**Mine Maps**

As required under R645-302-525-270

**CONTENTS**

**APPENDIX E**

**Other Information**

In accordance with the requirements of R645-301 and R645-302

**CONTENTS**